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# THE BATTLE OF CRETE
# AND
# ITS IMPLICATIONS FOR MODERN CONTINGENCY OPERATIONS



A Monograph
by
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Infantry


School of Advanced Military Studies
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ABSTRACT

THE BATTLE OF CRETE AND ITS IMPLICATIONS FOR MODERN CONTINGENCY OPERATIONS by Major Blair A. Ross, Jr., USA, 47 pages.

This monograph examines the implications for modern contingency operations of the World War II German assault on the island of Crete. Emerging United States security strategy places increasing reliance on crisis response capabilities. Evolving military doctrine, based substantially on American experiences in the last decade, stresses the achievement of quick, decisive victory with minimum casualties. The German experience on Crete suggests that contingency operations requiring forced entry may be prolonged and costly undertakings. The focus of research is on deriving applicable parallels between the seizure of Crete, recent United States experiences, and potential future contingency requirements.

The monograph first highlights emerging contingency requirements and corresponding doctrinal developments. It next describes the background to the seizure of Crete in 1941, Operation MERCURY. It then analyzes the assault through the use of tactical themes which relate this specific case to recent American experiences and to contingency operations in general. These themes are acquisition of intelligence, tactical and strategic surprise, operational planning, logistic preparations, the impact of tactical reverses, requirements for specialized units, and joint force integration at tactical levels.

From this analysis, the monograph concludes that a contingency response doctrine based only on recent American experiences is inadequate, potentially leading to failure in situations where determined and well prepared opposition is encountered. It recommends several factors for consideration in future contingencies, based on the tactical themes traced through the analysis of Operation MERCURY.

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# INTRODUCTION

As the United States adjusts its foreign policy to the post cold war era, it has adopted a new framework for its national security strategy. It has shifted from a reliance on forward deployed forces of considerable strength to the maintenance of a smaller forward presence, with elements based in the continental United States responding in the event of an overseas crisis.

The armed forces have reflected this shift with an increased focus on contingency operations, versus the former orientation on the execution of established war plans. The previous cold war concepts normally assumed the existence of regional alliances, along with an established infrastructure upon which to base a large-scale military response. The plans did not require the establishment of a lodgment in their initial phases.

Planning for the contingency operations inherent in the new security strategy can rarely make such assumptions. The United States is faced with a variety of potential threats and uncertain regional political conditions. Military responses to crisis may be required in areas of the globe offering little in the way of supportive regional powers, ready access to facilities, or established operational infrastructure. The critical precursor in such endeavors may well be a forced entry operation to secure and establish a base for subsequent operations.

Recent cases of American military action in response to crisis have formed a key segment of the foundation for emerging Army doctrine. Operations URGENT FURY in Grenada, JUST CAUSE in Panama, and DESERT SHIELD/DESERT STORM in the Persian Gulf have generated doctrinal concepts focused on obtaining a quick, decisive victory with minimal casualties. They are characterized by violent offensive action with overwhelming force, targeted

simultaneously against all potential centers of resistance to rapidly achieve success. Such concepts are frequently reflected in the draft revision to the US Army's keystone doctrinal manual, FM 100-5, Operations.[1]

Of significance, however, is the character of the opposition the Army faced in the operations of the last decade. The Grenadian Peoples Revolutionary Army (PRA) and the Panamanian Defense Force (PDF) were much less capable than the American forces deployed at short notice against them. Iraq's large and well equipped armed forces were restrained from preemptive action by their political leadership. They permitted an unmolested expansion of coalition forces which subsequently outmatched them in every respect. We may not have the luxury of a marginally effective foe or an unimpeded buildup in the future.

The experiences of the first few planeloads of Rangers at Point Salines Airport notwithstanding, the Army has not faced a truly demanding forced entry operation since the Second World War.[2] The increased likelihood of such operations within the context of the new National Military Strategy, along with their critical importance to the attainment of operational success, bolster the relevance of continued study of the tactical requirements of forced entry operations. The lack of recent experience against a determined and capable opponent argues for the examination of other historical examples, wherein mission requirements were essentially similar, the opposition more serious, and the outcome less assured.

The German assault on Crete in May, 1941, Operation MERCURY, provides a suitable case for study. It was a joint operation involving a corps-sized ground force supported by a substantial air component, enabling the attackers to attain air supremacy prior to the assault. It was staged at relatively short notice,

from an area with inadequate existing facilities and a transportation infrastructure degraded by damage from recent military operations. The allied forces defending the island were well trained, reasonably well equipped, in most cases well led, and fully prepared to meet the attack. The tactical conditions generally replicate any number of situations potentially facing the United States in the future.

The German experience in MERCURY highlights a number of tactical issues which form the basis for this study. These issues are evident to varying degrees in the American operations of the last decade. In the German case, their impact was compounded to the point of seriously jeopardizing mission accomplishment. They represent factors the Army must remain cognizant of as it adjusts its tactical doctrine to correspond with the emerging precepts contained in the revised FM 100-5.

The first issue is the acquisition of adequate intelligence. The expectations for our highly technical collection and analysis system are great. They shape our perspective towards assuming a detailed knowledge of enemy disposition and capabilities prior to commitment of forces. The intelligence system has not always been able to meet these expectations, however.

Related to this factor is a second concern, assumptions of strategic and tactical surprise. In an era of intense media focus on any military contingencies, the achievement of strategic surprise in a theater of operations is all but impossible. With operations necessarily oriented on the key airfield or port facilities needed to sustain an intervention, tactical surprise is equally difficult to achieve.

A third concern encompasses the area of operational planning. Planning must provide for the full integration of all participants and allow considerable flexibility. All feasible

concepts for accomplishing the mission must be fully and fairly considered. The issue of concentration versus dispersion of effort is of particular concern. Operational pressures for rapid achievement of decisive results, with a tactical focus on quickly gaining the initiative through simultaneous attack at key points, generate a risk of failure to mass sufficient combat power in vital areas.

A fourth factor highlighted is the impact that an austere logistical infrastructure can have on the development and implementation of contingency plans. Requirements to stage sufficient forces within tactical ranges of the objective area may demand extensive preparatory efforts prior to execution of the operation. This will in turn give the enemy more time to prepare his defenses and reinforce.

A fifth issue is the impact of serious tactical reverses on units and leaders. Ultimately, mission accomplishment is the measure of success of an operation. Pyrrhic victories are nevertheless victories, and operations aborted after initiation in order to minimize losses remain defeats. Initial failure to achieve tactical objectives and the incurring of unexpectedly heavy personnel and material casualties must be kept in perspective by key decision makers. Commanders making critical decisions must have the judgment, determination, and aggressiveness to be able to bring their forces through the inordinate friction of contingency actions.

Related to this issue is a sixth concern, the necessity of maintaining units of great resiliency and cohesion for the execution of contingency operations. Rarely will a military institution be able to maintain its entire force structure at a level of capability sufficient to achieve mission accomplishment under the extremely demanding conditions of forced entry

operations. It will have to maintain a spearhead of well-resourced units fully prepared for this task.

Critically important as well is a final issue, the joint integration of forces at tactical and operational levels. Contingency operations may demand the employment of all forces quickly deployable to the area in question, regardless of service or prior experience. These elements must be fully capable of coordinated and cooperative action, from the lowest to the highest echelons.

These themes surface repeatedly in the examination of the assault on Crete. They provide a framework for drawing the relevant lessons from this historical case, and illuminate the continued relevance of the German experience in Operation MERCURY to the United States Army today.

## II

## OPERATIONAL CONTEXT: CRETE AND THE BALKANS CAMPAIGN

Understanding the context within which MERCURY was executed provides an essential background to the tactical plans which evolved. The British had occupied Crete the day after the Italians had invaded Greece, simultaneous with the introduction of British forces onto the Grecian mainland. Their presence presented an immediate and imposing threat to Germany's ally Rumania and the oil fields around Ploesti, vital to the German war effort.[3] As a consequence of Mussolini's ill-starred invasion, Hitler was forced to hastily launch an operation to eliminate this threat and to secure his southern flank for the impending invasion of Russia.[4]

The battle of Crete was the culmination of the German Balkans campaign, an endeavor for which no comprehensive plan had

been prepared. With the attainment of unexpectedly rapid success in the operations in Yugoslavia and mainland Greece, the campaign objectives were expanded. Though not wanting to divert significant resources from BARBAROSSA, Hitler and the Wehrmacht High Command (OKW) staff nevertheless recognized the value of a reasonably strong position in Greece to contest British control of the eastern Mediterranean. Though the importance in this respect of Crete itself had been suggested as early as October of 1940 by General Halder, Chief of the General Staff, active consideration of Crete as an operational objective did not begin until early April, 1941.[5]

The Balkans campaign had been put together incrementally and improvised as the situation in the Mediterranean theater developed.[6] This impromptu nature would be reflected in the planning and execution of the seizure of Crete. Improvisation has played a major part in the execution of modern contingency operations, even those planned in considerable detail. Though the operational scenario of a prospective contemporary operation would undoubtedly be quite different, its impact on the tactical plan would be similar to the effect the ad hoc nature of the German Balkans campaign had on Operation MERCURY.

## III

## ACQUISITION OF INTELLIGENCE

The initial focus of the German commanders was the status of Allied forces defending the island. As it turned out, German intelligence on the enemy situation on Crete was highly inaccurate. Aerial photographic reconnaissance had failed to pick out the vast majority of their well camouflaged positions, with pilots reporting the "the island appeared lifeless".

Lacking more accurate sources of information, Student's intelligence officer produced an estimate that placed the British garrison on Crete at no more than 5,000 strong, with only 400 men at the airfield at Heraklion, and none at Rethymno. It stated that the large numbers of New Zealand and Australian troops evacuated from Greece had been shipped directly to Egypt, and that there were no appreciable Greek forces on the island. The estimate even went so far as to predict, based on an assumption made by an Abwehr agent "familiar with the area", that the German invaders would be warmly received by the local population.[9]

Contrary to the estimates and assumptions made by the Germans, the forces of the British Empire defending Crete were far from unprepared to meet the onslaught. In actuality, allied strength on the island stood at about 27,500 British, Australian, and New Zealand troops, with an additional 14,000 Greeks in Army and Gendarmerie formations. The Greek units were of mixed quality, and though motivated, most troops were recently recruited and virtually untrained.[10] The Allied units had come through the battles in Greece and the subsequent evacuation reasonably intact, though their heavy equipment stocks were limited. Aerial strength prior to the invasion never exceeded 36 aircraft, approximately half of which were non-operational at any one time.[11]

Command of the British Imperial forces on Crete was entrusted to New Zealand Major General Bernard Freyberg. He had been commander on the island since 30 April, when he had been sent by Field Marshal Wavell, the British Commander-in-Chief for the Middle East, to take over the organization of the defense of the island. The King of Greece had given Freyberg command of all Greek forces on the island on 21 April, so there was little friction with regard to integrating them into the defense.[12] All elements were dug in, camouflaged, and alerted to the impending

assault. In response to a direct inquiry from Churchill regarding the status of preparations for the defense, Freyberg replied that he was "confident in his forces' ability to deal with an airborne attack".[12]

The final result of the broad German intelligence failure was a very inaccurate appreciation of potential enemy resistance on the island. This had, in turn, a significant influence on the operational concept. Much of the difficulty later experienced by the Germans on Crete can be directly attributed to this critical deficiency.

Recent experiences of the United States pointing to gaps in our intelligence system provide a comparison. Prior to Operation URGENT FURY, the size and capabilities of the Cuban forces known to be assisting the Grenadian regime were not well established. In this case, the initial parachute assault nearly collapsed in the face of unexpectedly heavy anti-aircraft fire. Once established on the island, exploitation was slow in the face of an overestimated enemy capacity to resist. During Operation JUST CAUSE, United States forces were impeded in their efforts to secure urban areas and reestablish public order by several "Dignity Battalions", the existence of which was previously unappreciated. During DESERT STORM, American forces encountered an entire Republican Guard Special Forces Division arrayed in the Euphrates Valley, the existence and location of which had been unknown. These instances indicate the continued potential for inaccurate estimation of enemy capabilities. Operation MERCURY highlights the impact of such failures in an extreme case.

IV

## TACTICAL AND STRATEGIC SURPRISE

Modern forced entry operations routinely rely on some degree of strategic and tactical surprise to help address the initial imbalance in combat power between lightly equipped attackers and heavier defending forces. For MERCURY, Student had few illusions about his ability to achieve strategic surprise with his landings. The use of paratroopers to block the allied retreat at the Corinth Canal bridge earlier in the campaign had disclosed their presence in the theater.[13] He was also aware of his vulnerability to reports by Greek agents of the assembly and marshaling of his forces.[14] Not known to him, however, was the capture by the allied forces in Holland of a copy of a classified German airborne operations manual. It described in detail their focus on airfields as tactical objectives. Student stated after the war that knowledge of this fact would have been a major consideration in his development of the plan.[15]

In actuality, Freyberg had a significant amount of information available to him concerning the impending attack. The German high command was unaware that their radio communications were vulnerable to allied intercept. In their first major test under operational conditions, Ultra intercepts identified the specific units, strengths, and assigned objectives for the main elements involved.[16] This information was confirmed by the work of agents in Athens, one of which was able to specify the day of the attack as anytime after 17 May.[17] Based on this detailed knowledge, Freyberg oriented his defenses in the weeks preceding the assault to protect the airfields and principal seaborne approaches.

German assumptions of tactical surprise on Crete were thus highly optimistic. This factor, in combination with the general failure of their intelligence system to accurately portray the enemy situation, caused the German attackers serious difficulties from the outset.

Recent American contingency operations have realized only limited benefits from surprise in the initial assaults. Enemy forces in Grenada and Panama were concentrated near key objectives. Success and minimum casualties in Grenada resulted primarily from the generally low capability of the PRA. Even then, they were able to repulse a special operations air assault and severely press parachuting Ranger units, all in obvious objective areas. In Panama, American forces were assisted immeasurably by the conduct of a series of maneuvers prior to the invasion. They were designed to both exercise treaty rights and dull PDF response to large-scale military activities. They had the effect of delaying PDF reinforcement of the easily identified targets after evidence of an impending operation was received by Panamanian leadership. In future contingency scenarios the United States is unlikely to have the unique luxury of a large and active prepositioned force. MERCURY demonstrates the potential difficulty in facing a forewarned and well prepared foe.

## V

## OPERATIONAL PLANNING

High-level service parochialism and inter-allied friction were prominent factors in the preparation for MERCURY, mirroring in many respects issues plaguing modern contingency planners. As the German armed forces began to exert an increasing role in support of their frequently inept Italian allies, Crete was not

the only potential objective that received consideration. The German *Kreigsmarine*, faced with the requirement to sustain the gradually strengthening German presence in North Africa through its Italian surrogates, was concerned with the threat in the central Mediterranean posed by British airfields on Malta. Its proposal, supported eventually by both the Army and the *Wehrmacht* High Command (OKW), was for commitment of the limited resources available to the seizure of that island.[18]

The alternative of Crete was presented to Hitler by the Luftwaffe's *Reichsmarshall* Goering. Its genesis was political as well as operational, a fact that would effect the venture throughout its planning and execution. Goering's credibility with Hitler was low following the Luftwaffe's failure in the Battle of Britain. It was clear that the upcoming invasion of Russia would be primarily an Army initiative, with the Luftwaffe in support of its armored spearheads. Goering eagerly grasped the Crete initiative as a vehicle for reviving the prominence of the Luftwaffe.[19] The attitudes of the Army and *Kreigsmarine* to the proposal were reserved.[20]

Hitler ultimately chose Crete, and on 25 April 1941 OKW issued a Fuehrer Directive ordering the execution of Operation MERCURY, the seizure of the island. The date specified for the assault was 17 May, barely three weeks away.[21]

The detailed development of the Crete proposal was done by Luftwaffe Lieutenant General Kurt Student, commander of the Luftwaffe's airborne assault formation, the XIth Air Corps. His planning effort considered a number of factors which dominated the concept for the assault, many of which reflect similarities to modern contingency scenarios.

The time available for planning, staging and executing the operation was short. The Fuehrer Directive stipulated that no

aspect of the operation could interface with the ongoing preparations for the invasion of Russia, scheduled for the beginning of June. Beyond the three weeks to plan and prepare for the assault, the Luftwaffe expected that defeating the forces defending the island would require an additional five to seven days.

As in the modern American experience, various alternative operational concepts were reviewed by the decisionmakers involved with MERCURY. The process did not proceed without disagreements between key individuals. Student, believing the defenders weak and desiring to exploit the airborne troops' capability for multiple simultaneous assaults, selected seven key objectives for seizure in the initial phase of the operation. The most important were the airfields at Maleme, Rethymno, and Heraklion; the capital city, Canea; and the island's principal port at Suda Bay.[22] Student was concerned about the allied ability to forecast a point of main effort and effectively block it. His counter was to take all the key objectives at once, stating that "they will be expecting us on Crete. They will ask themselves, 'where?'. Our answer should be, 'everywhere that matters'!"[23]

In contrast to this concept, General Alexander Lohr, commander of the 4th Air Fleet (the senior Luftwaffe headquarters in Greece) favored a more conservative approach. He felt that the assault should concentrate available resources in a *schwerpunkt* at Maleme, the best of the available airfields, followed by a ground offensive to clear the rest of the island. He doubted the ability of the supporting combat aircraft to provide adequate assistance to the lightly armed initial assault troops if they were too widely dispersed.[24]

The final compromise, decided on by Goering himself, adhered to the early assault on all of the objectives, but broke the

attack into two phases; the western objectives would be seized in the morning, whereupon the Luftwaffe supporting effort would shift to the eastern targets, permitting their seizure in the afternoon.[25] This guidance would drive the planning from thence forward.

The forces available for the attack were for the most part contained in the XIth Air Corps. This formation included the Luftwaffe's 7th Air Division, the Wehrmacht's only parachute capable unit. Though it lacked any tanks, it was a powerful 17,000-man organization with three parachute infantry regiments and a full range of supporting arms. The Corps also contained a separate Assault Regiment, a specially selected four-battalion outfit trained in glider as well as parachute operations.

The XIth Air Corps also controlled its own airlift component, a combination of regular squadrons and ad-hoc elements especially formed for major operations from various multi-engine training schools and administrative units. All operated the venerable Ju52 transport, approximately 500 of which were to be made available for the airborne assault.[26] Air superiority and close air support for the ground units were to be provided by the VIIIth Air Corps, a formation of over 600 fighters, dive bombers, and medium bombers controlled by Lieutenant General Freiherr von Richtofen.[27] This was also a veteran formation, tailored for the tactical support of ground operations, and thoroughly experienced in the campaigns in Poland, France, and the Balkans.

In addition to these Luftwaffe assets, the Army provided the 5th Mountain Division to airland after the airfields were secured and assist in completing the seizure of the island.[28] They were elite troops within the Army, and had developed a bond with the parachute troops during the bitter struggle for Narvik in 1940. Further, they possessed capabilities clearly valuable in the

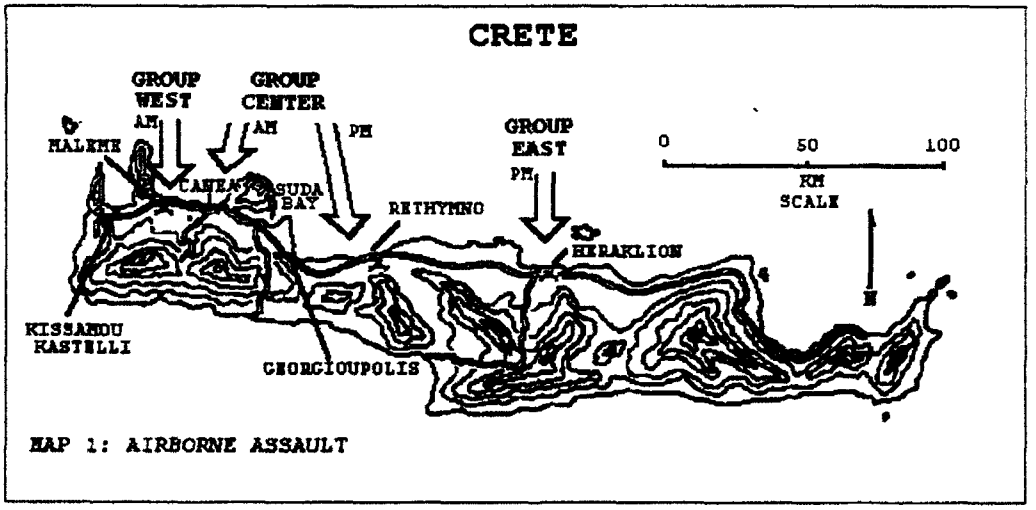
rugged terrain of Crete. The 5th Mountain Division commander, Lieutenant General Julius Ringel, was informed on 8 May that his division would participate in the operation, scheduled to start eleven days hence. He was enthusiastic about the assignment, and was fully involved in subsequent planning and coordination. Any hesitancy on the part of the higher Army leadership was not evident at this level, and preparation went forward in a spirit of genuine cooperation.[29]

The planners also considered the role to be played by sealifted forces. With the massive air umbrella that would be available, a true combined arms operation with a robust seaborne echelon provided by the Army might have been conducted, lowering the potential risks. General List's 12th Army, headquarters for German Army forces in Greece, and the *Kreigsmarine's* Navy Group South (which coordinated naval operations with Italian forces) had been ordered to support the operation in the Fuehrer Directive. Goering, however, was reluctant to share the laurels with his sister services.[30] In the scheme ultimately adopted, a small seaborne element of some 7,000 troops and most of the heavier weapons would supplement a force of 15,000 troops delivered by air.[31]

The command and control concept for Operation MERCURY was generally straightforward.[32] With the VIIIth Air Corps' clearly defined supporting role and Student's direct supervision of the airlift element, he had more than adequate influence over the forces that would support his ground units. This arrangement incorporated a unity of effort behind the ground commander unprecedented in modern American contingency operations. Also important, a German ground force split almost equally between Army and Luftwaffe assets was tightly integrated, a factor which was absolutely critical to their ultimate success. All key

headquarters were collocated in Athens during the final stages of planning and preparation, enabling the rapid coordination of operational details.[33]

The finalized concept closely resembled that of a modern contingency plan. It would be a five-phased operation. First, air superiority would be established and a pre-invasion bombardment conducted. Next would come the parachute assault, the critical phase of the operation. The plan called for division of the assaulting force into three groups. Group East was oriented on Maleme, Group Center on Canea and Rethymno, and Group West on Heraklion (see Map 1).[34] This would be followed by the airlanding operation to reinforce the airheads. Concurrent with the continued airlandings would be the delivery of a light seaborne echelon over the beach. Finally, a heavy sealifted echelon would be delivered through a captured port.[35]



MAP 1: AIRBORNE ASSAULT

Air superiority and air support operations were to be accomplished by the combat aircraft under the control of the VIII Air Corps. It would begin its major effort three days prior to the assault and continue its support until the operation's conclusion.

In the equivalent of a contemporary Suppression of Enemy Air Defenses (SEAD) preparation, the parachute drops would be preceded by fighter and dive bomber attacks to suppress anti-aircraft fire. In a role similar to that of modern Special Operations Forces, seventy gliders would land detachments just prior to the arrival of the transport aircraft to eliminate identified anti-aircraft sites and command centers and to seize key terrain features.[16]

The operational planning conducted for MERCURY reflected many characteristics similar to the crisis response procedures and capabilities used recently by the United States. The parallels are particularly evident in time sensitive situations where little time has been available for the detailed analysis of alternatives and the negotiation of compromises among participants. Prior to executing URGENT FURY, for instance, a number of operational concepts were considered. Differing service perspectives generated considerable debate between Navy, Air Force, Army, and Marine Corps leaders concerning the most appropriate means to apply to the tasks at hand, and a degree of competition for missions was present among these elements.

In pursuit of rapid success, the final plan distributed airborne, amphibious, and special operations forces across an array of targets, rather than concentrating on the decisive location at Point Salines airport. This made seizure of this key objective a much more difficult and challenging task for the forces assigned to it, needlessly jeopardizing the entire operation.

The forces employed in MERCURY were mirrored by those used during URGENT FURY; initially assaulting special operations units, a parachute assault echelon with a substantial airlanded follow-on force, and assistance from a seaborne component, all under an

umbrella of aerial supremacy. As in MERCURY, they were joint forces. In the area of command and control, URGENT FURY demonstrated the dangers of approaching a contingency operation with an ad hoc headquarters controlling geographically separated subelements. In contrast, MERCURY illustrates the benefits of a relatively unambiguous command scheme and collocated headquarters.

## VI

## LOGISTICAL PREPARATION

Operation MERCURY resembled the operations foreseen in many modern theater crisis response scenarios in that it had only a limited network of established installations to support the forces involved. It was launched at relatively short notice from this austere area, requiring tremendous effort to establish a minimum capability. Even then, operations were delayed and execution disrupted by logistical inadequacies, with serious consequences in the objective area.

Truck transportation was limited, roads were generally poor, railroads damaged during the recent fighting could not be repaired, and some of the harbors were mined.[37] The few available airfields in southern Greece were totally inadequate to support the operation, which involved over 1300 aircraft.[38] During the first three weeks of May extensive work was done laying out and preparing airfields for operation. This was particularly difficult due to the damaged road and rail network, and was made possible only by the air movement of ground support staffs and much of their equipment.[39] The Supply and Administration officer of the XIth Air Corps conducted a personal reconnaissance of the area around Athens and designated a number of "auxiliary airfields" for development and use. Many of these sites, such as Topolia and

Megara, were "no more than large plains between mountain ranges", and though large enough, poor soil conditions presented great difficulties.[40] The dusty conditions obscured visibility and were especially hard on aircraft engines.

Preparing and assembling the aircraft units themselves was no small chore. The Luftwaffe's air transport fleet was worn out after continuous operations in support of previous campaigns, and had to be overhauled prior to the operation. A massive effort was required to assemble the necessary airframes.[41]

The shipment of supplies into the area proved to be an especially daunting task, particularly the provision of fuel for the massive aerial fleet. The first day's air transport requirements alone required 650,000 gallons of fuel.[42] Route conditions mandated that it be brought in by tanker, loaded into forty-five gallon drums for transport to the airfields, then pumped by hand into the aircraft.[43] Shipping for the seaborne echelon was hard to come by, and the sealift consisted mostly of confiscated fishing vessels under Italian escort.[44]

Given the improvised nature of the preparatory effort, it was almost inevitable that something would cause a delay. On 16 May, with the majority of the force assembled and ready to begin the operation the next day, an irremediable shortage of aviation fuel still existed. A large tanker with the allocated fuel was not able to reach the area until late on the 19th, postponing the launch date until 20 May.[45]

Operation MERCURY demonstrates the difficulty and potential liabilities associated with staging short-notice contingency operations from an area lacking a suitable infrastructure. Recent American experiences have not. URGENT FURY was launched from an extensive network of nearby installations in the United States. JUST CAUSE made use of these, as well as numerous bases within

Panama itself. Months were required to expand the existing facilities in the Persian Gulf to handle the logistical burdens of DESERT STORM.

## VII

## THE IMPACT OF TACTICAL REVERSES

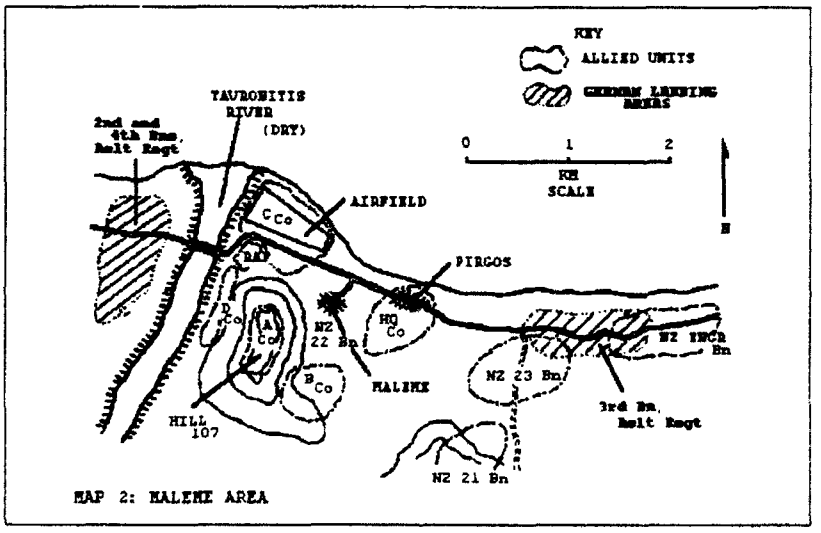
The execution of Operation MERCURY highlights a further factor relevant to modern forced entry operations. The initial assaults did not go nearly as well as expected. Tactical reverses and serious losses in unit leadership were experienced in every objective area, placing enormous stresses on the key commanders responsible for conducting the operation. Achieving success on Crete demanded the highest measures of resolve and determination on the part of the entire chain of command.

The lead elements of the 7th Air Division were the gliders carrying detachments of the 1st Battalion of the Assault Regiment on their special missions. Among them was a group which carried the division commander and his staff. In an ominous quirk of fate, the glider carrying the general suffered a freak accident and crashed on a small island in the Aegean Sea. There were no survivors.[46] This was the first of many casualties among key leaders.

The initial glider landings met with mixed results. A few anti-aircraft positions were destroyed, and the Tavronitis river bridge secured. Success was not universal, however, and casualties were heavy.[47] A typical example is that of the element headed for Hill 107, dominating Maleme airfield. The force was split into two groups on arrival. Heavy anti-aircraft and machine gun fire raked gliders before and after landing. The first group was pinned down and destroyed piecemeal by defending troops from the 22nd New Zealand Battalion. The commander of the unit, Eban

Emael hero Major Koch, led the second group in an attack on the hill. He was seriously wounded during the assault, and the survivors of the group withdrew to the Tavronitis riverbed to await reinforcement from the paratroopers just beginning to arrive.[48] Hill 107, which would assume critical importance in the battle, remained firmly in the hands of its defenders. These preliminary operations by forces conducting specialized tasks had fallen well short of expectations.

The elements conducting the main attacks had little better results. Group West's drop began inauspiciously (see Map 2).



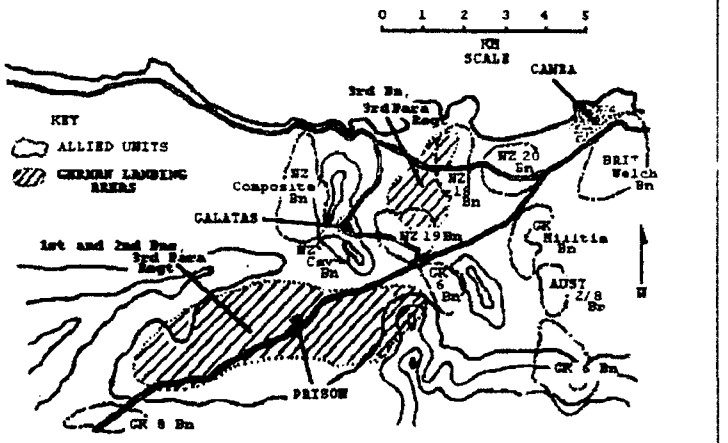
MAP 2: MALEME AREA

The 3d Battalion of the Assault Regiment landed on a drop zone between Pirgos and Platanias, directly on the positions of the alerted New Zealand 23rd and Engineer Battalions. Hit while in the aircraft or under their parachutes, dispersed on landing, and for the most part pinned down and unable to reach containers holding their heavier weapons, they were in a desperate situation from the start. The battalion commander, his second in command, and three of four company commanders were killed outright, along with over 400 troops. Only one company was eventually able to organize itself, at a meager 40- strength. One officer, a

Lieutenant, survived unwounded. The battalion had no hope of carrying out its mission.[49]

The other main elements of the Assault Regiment, the 2nd and 4th Battalions, fared somewhat better, landing in open and undefended ground to the west of the Tavronitis River. Both battalions were nevertheless halted on the forward slopes of the hill by fierce resistance, and the regimental commander, General Meindle, was severely wounded during the attack.[50] As the morning wore on, Group West remained stalemated short of all objectives, its commander wounded, two battalions virtually wiped out, and increasing casualties burdening the remaining two.[51]

Group West was not the only element to be tried by an initial failure to seize it's assigned objectives. Group Center's first echelon, built around the 3rd Parachute Regiment, experienced a similar initiation to the fight (see Map 3).




MAP 3: PRISON VALLEY AREA

The 3rd Battalion of the regiment landed near the coast, right on top of the 18th and 19th New Zealand battalions. It immediately sustained heavy casualties, and was cut up into small groups struggling to make their way to the main body of the

regiment. Only 350 of the 800 members of this unit survived the battle.[52]

The rest of the regiment landed with less opposition further inland, at a location called Prison Valley. Attacking towards Canea, they were soon slowed by stiff and unexpected resistance from Australian and Greek troops on the Galatas heights, blocking the route to the town. Lacking the benefit of the planned supporting attack from the 3rd Battalion, the attack ground to a halt by late afternoon.[53] The regiment had achieved little beyond tying down enemy forces and preventing the immediate reinforcement of Maleme.

At the point when the transport aircraft began arriving back at their airfields to pick up the second lift, the impact of the inadequately developed supporting infrastructure in Greece began to be felt. Huge dust clouds were raised as each aircraft landed, and waiting aircraft, fuel running low, had to circle until visibility improved. Efforts to wet down the fields were futile in the heat. Though aircraft losses during the actual drop had been light (only seven transports were shot down), more than twice that number were now destroyed or irreparably damaged in landing accidents. Operations were further delayed by the requirement to laboriously hand-refuel each aircraft and repair often extensive battle damage.[54]

These problems produced a considerable delay in the departure for the afternoon drops. In an effort to keep as close to the schedule as possible, individual squadrons and groups departed as soon as they were assembled over the airfields. The afternoon drops thus went in piecemeal rather than en masse, and previous losses in aircraft resulted in 600 members of the 1st Parachute Regiment being left behind.[55] Efforts to inform XIth

Air Corps headquarters of the problems were impeded by unreliable local phone lines and sabotage.[56]

In spite of these delays, the air strikes meant to support the drops were conducted as scheduled in the early afternoon.[57] The attacks were premature and largely ineffective, good camouflage and fire discipline having protected most of the defending units.[58] The bombing served little more purpose than to alert the defenders to the impending assault.

Due in large measure to the lack of synchronization with pre-assault attacks and the fragmented nature of the parachute drops, the second lift experienced heavier losses to anti-aircraft fire than the first. The units were more disorganized on reaching the ground, and had an even tougher time assembling and moving toward their objectives than the elements dropped during the morning.[59]

The drop of Group Center's second echelon at Rethymno was spread over a period of over two and one-half hours. One of its battalions was destroyed on landing, and the other was unable to get to the airfield.[60] The regimental commander was captured by early evening.[61]

Group East at Heraklion shared Group Center's experience on jumping. Again, the delay between the bombardment and the drop was considerable, and the defenders soon overcame what little effect it had. The drop was extended over a two hour period and anti-aircraft fire was heavy.[62] One battalion was quickly destroyed. In one company only five men survived, escaping by swimming out to sea. Over 300 members of the battalion were killed, 100 wounded, and dozens captured, most within minutes of dropping.[63] The remaining elements, scattered, disorganized, and heavily pressed by British and Australian forces, were unable to secure the airfield or the town of Heraklion itself.[64]

As the first day drew to a close, the Germans on Crete were in a dire situation. No airfield was in their hands. This lack of initial success, preventing the planned reinforcement lifts, portended disaster. Five entire battalions had been rendered completely ineffective, most in the first minutes of their assaults. Four of the eight remaining had been scattered and heavily attrited. Wounded and healthy alike were suffering greatly after hours of intense combat in the hot, waterless terrain. Command and control had been severely disrupted by grievous losses in key leadership and damage to communications gear during the drops.

The casualty figures were staggering. Later analysis would show that 1,856 of Germany's finest soldiers were killed on the first day, with the total rising to over 2,000 when seriously wounded paratroopers, lacking adequate treatment, finally died. *This one-day figure was greater than the total killed in any division in the entire Wehrmacht in the war to date,* and gave MERCURY a bloody character as yet unknown to a German high command accustomed to rapid victories with relatively light losses.[75]

At the lower levels, junior officers and noncommissioned officers assumed control of surviving units and continued their missions when and where they could. The initial reverses that had overwhelmed the units on Crete generated enormous pressures on more senior members of the German chain of command, as well. They were working with equal exertion to adjust plans to the new situation.

Due to unexpected communications difficulties, it was not until just after midday that General Student in Athens received the first indication of problems, when the first aircraft scheduled to go in at Maleme were unable to land.[76] By late afternoon, when Student finally received the first reports from

Group West, the true magnitude of the crisis became evident. It was obvious that British resistance was much stronger than anticipated, and Student knew from the reports of the many key leaders killed or missing that overall casualties must have been very heavy.

As the day progressed, the reports got no better. Aerial reconnaissance showed that outside of Maleme and the Prison Valley were only scattered groups of paratroopers, their positions marked with German flags, struggling to hold on to what little gains they had made. By nightfall on 20 May, everyone realized the scale of the losses and expected strong counterattacks. In Athens, Lohr and von Richtofen were convinced the operation had been a debacle and would have to be aborted.[68] A gloomy atmosphere pervaded the headquarters, matched by a somber mood at OKL in Berlin. Hitler forbade any mention of the operation in propaganda announcements. Just before midnight, when further reports adjusted casualty figures yet higher, Student's Chief of Staff asked him whether or not he should begin studying the requirements for "breaking off" the engagement.[69]

Student once again reviewed the situation. The surviving elements of the Assault Regiment were only force even close to taking an airfield. He realized the near impossibility of evacuating any of the committed troops, meaning the effective loss of his entire parachute division and the enduring discredit of a concept he had labored years to realize. He also appreciated the high stakes involved for the Luftwaffe in its inter-service struggles with the Army. Lohr, lacking experience in this type of operation, left the final decision to his subordinate.[70]

Student was familiar with challenging situations. He had shepherded the airborne assault concept from its embryonic stages through three military campaigns thus far, and had shared its

every trial and tribulation. He had been seriously wounded during the invasion of Holland.[1] Student now demonstrated the spirit and drive that had characterized his decades of service. He resolved not to give up until he had made every possible attempt to salvage success. "I decided to concentrate all of our remaining forces against one spot. We selected Maleme because here, at least, we could see a glimmer of light".[2] He directed his senior paratroop officer remaining in Greece, Colonel Ramcke, to take charge of the paratroopers left behind from the second wave and parachute into Maleme the next morning to assume control and reinforce the effort to secure the airfield. He directed a qualified pilot on his staff, Captain Kleye, to fly a Ju52 to Maleme immediately to determine if it was at all usable. Kleye successfully executed this mission, landing and taking off again in the darkness and returning within a few hours. Student then ordered the dispatch of critical resupply and aerial evacuation flights. He directed General Ringel to be prepared to begin sending his mountain troops to Maleme after the parachute drops the next morning, and told him that he would go to Crete to assume command of all German forces on the island that day.[3] The die was cast for the final effort to seize a foothold on Crete.

Success was not immediate in the wake of these decisions, and more trying times greeted the Germans during their second day on Crete. They received their first break, however, when the defenders of Hill 107 withdrew during the previous night, following the defeat of a counterattack they had launched that afternoon. Unfortunately for the hard-pressed Germans, the fortuitous success on Hill 107 was not repeated in the other objective areas, and developments at every locale continued to place tremendous pressure on the German units and their leaders.

At Maleme, the first half of Ramcke's reinforcements dropped in two groups, east and west of the airfield. He had thought the reported withdrawal from Hill 107 had taken the defenders well away from the area. The paratroopers coming down in the east landed directly on the still-occupied positions of the New Zealand 23rd and Engineer Battalions, repeating an all too familiar story. Only 80 survivors, moving individually or in small groups, eventually made it to German lines.[74]

Regardless of this setback, Ramcke launched an assault towards Pirgos on the eastern side of the airfield in an attempt to drive the defenders out of direct-fire range. Though covered by air attacks, it lacked the assistance of the supporting effort from the east. By late morning it had been only partially successful, but at least helped reduce the effects of enemy small arms fire on the airfield itself. Longer range Bofors anti-aircraft systems and artillery were still able to fire on approaching and landing aircraft.

The Maleme airfield was 800 meters long and 150 meters wide, with an unpaved surface.[75] The first aircraft to try to use it that morning were driven off by heavy fire. In a daring decision, flight leader Captain Kleye elected to attempt to land his aircraft on a rocky stretch of beach north of the airfield. He was successful, and though one of the aircraft was blown up by a mortar shell, they were able to deliver vitally needed supplies and take off the worst of the casualties.[76]

Though realizing that the reinforcement drop and subsequent attack had been only marginally successful, Student decided to take what advantage he could of Kleye's landing. At midday he ordered the beginning of the reinforcement lifts to bring in the lead elements of the 5th Mountain Division, even at the risk of losing aircraft.[77]

It immediately became apparent that the airlanding operation would be costly. Aircraft landed on the beach, the airfield, and even on adjacent roads. Many were damaged or destroyed on landing, either hit by indirect fire or crash landing on the rough field. By nightfall, more than 80 wrecked Ju52s littered the sides of the runway and the beach, almost half of the aircraft that had landed in the first place.[78]

The lead battalion of the 5th Mountain Division was on the ground, however, and most of its personnel had come through the landings intact. The airlanding operation was off to a precarious start. Informed of its progress, General Jeschonnek in Berlin, with Goering's approval, ordered the airlanding operations to continue regardless of transport losses. It was "an admission from OKL that the whole operation was in jeopardy, and nothing mattered any longer except success; everyone and everything on Crete was committed and expendable".[79] Hitler continued to forbid any mention of the operation in propaganda broadcasts.

Events occurring on the night of the 21st/22nd of May seemed at first to further squelch any hope the Germans had of establishing themselves on Crete, putting further strain on the German chain of command. The first involved the initial seaborne echelon, upon which Student now rested considerable hope. Intercepted by units of the Royal Navy, it was split up and destroyed. Only one vessel made it to Crete by the next morning. The few survivors, along with the following half of the seaborne echelon, returned to Greece.[80]

A second event was the execution of an Allied counterattack at Maleme. Ordered by General Freyberg for 0100 on the 22nd, it was delayed by complex preparatory movements and did not begin until near dawn. Employing only two battalions, the attack was repulsed by early afternoon after making only limited gains.[81]

In Athens, Student had anxiously followed the evolving situation. Though discouraged at the news of the calamity experienced by the seaborne echelon, he had resolved to continue the airlanding of reinforcements as soon as dawn broke. The arrival throughout the morning of more mountain troops, rapidly fed into action against the counterattack, was critical to the successful defense of the tenuous airhead perimeter. Three more battalions of infantry, along with supporting batteries of pack howitzers transportable in the cramped Ju52s, came in during the day. Though the airfield remained under indirect fire, losses were less severe than on the 21st.[32]

The Luftwaffe severely punished the Mediterranean Fleet once the sun came up on 22 May, forcing its withdrawal from the Aegean Sea.[83] With the Royal Navy driven from the area and his counterattack stopped, Freyberg became discouraged. Though he still had five strong battalions and a number of tanks remaining on Crete, he feared that forward elements might be cut off on the coast road through attacks by the reinforced Germans at Maleme and the paratroopers still in the Prison Valley. He reluctantly approved a withdrawal, to take place early the next morning.[84] This decision basically conceded all hope of retaking Maleme airfield, and marked the key turning point in the battle.

Initial lack of substantial success, accompanied by heavy casualties, losses in key leadership, and continued reverses as hastily adjusted plans fail to produce the hoped for results, place enormous strain on every level of the chain of command. There is no precedent for the examination of the impact of such situations in recent American experience. In Operation URGENT FURY, difficulties securing the airfield were serious only for a period of a few hours. Casualties never approached the level where termination of the operation was considered. JUST CAUSE was

nearly flawless in comparison to the assault on Crete. Operation MERCURY generated countless situations demanding the utmost aggressiveness, resolution, and courage from leaders at all levels.

## VIII

## MAINTAINING COHESIVE, RESILIENT UNITS

The German experience on Crete highlights an additional factor significant for contemporary forced entry requirements, the necessity of maintaining units specially equipped and trained for these exacting tasks. MERCURY imposed monumental burdens on the Luftwaffe and Army forces taking part. The wide dispersion of forces called for in the plan, the difficulty of launching a coordinated assault from the austere base area, and the unexpectedly heavy Allied resistance combined to severely disrupt the units conducting the assault.

The Luftwaffe's paratroopers were an elite and highly selective body of troops. They were specially equipped and rigorously trained for their demanding tasks, and had been previously employed to good effect in Scandinavia, Holland, Belgium, and Greece. At this stage of the war they were an experienced and highly capable force, having learned to deal with adverse situations during such strenuous operations as the battle for Narvik and the assault on Waalhaven airfield. They needed every ounce of their expertise in such activities during their assault on Crete.

The paratroopers were at a distinct disadvantage from the moment they left their aircraft. Many were killed or wounded during descent. In contrast to the practices established by British and American airborne forces, few German paratroops carried their primary weapons with them when they jumped. Armed

only with pistols, they had to locate and recover the special containers holding the weapons, which were dropped with them from racks beneath the aircraft.[35] For units which landed in close proximity to the enemy, this could be a deadly practice. Further, the climatic conditions on Crete during the dry late spring season were brutal. Blistering heat was accompanied by an almost total lack of ground water. German troops jumped with one canteen, wearing the same uniforms used in Norway the year before. Their strength was rapidly sapped by arduous fighting in the glaring sun.

Despite these adverse circumstances, however, those various units of the 7th Air Division that had been able to collect themselves remained in action. Small-scale local attacks kept Allied forces committed across the island. Larger units maintained pressure at key points. Any opportunity left open by the defending forces was rapidly exploited.

The experiences of the two battalions of the 75th Ranger Regiment during the first hours of Operation URGENT FURY validate the continued requirement for selected units. The unit was disorganized by a fragmented drop, robbed of the cover of darkness by delays at higher levels, and lacked the anticipated support of special operations units that had been unsuccessful during infiltration. The Rangers nevertheless seized the airfield at Point Salines in a tough assault that relied on the maximum effort and initiative from every soldier that jumped into action. The example of the German paratroopers on Crete serves to reinforce this consideration

## IX

## JOINT TACTICAL INTEGRATION

German operations on Crete also illustrate a final factor of

continued relevance, the importance of the capability to jointly integrate forces at every level. MERCURY placed a premium on the ability of the Luftwaffe parachute and Army mountain troops to completely unify their activities from the lowest tactical echelons to those of senior leadership. This was executed with minimal prior coordination, in the midst of intense combat. It was crucial to their eventual success.

The actions of the first mountain units to arrive on Crete provide a vivid illustration of this point. Landing under fire in the early afternoon, the first elements of the 100th Mountain Regiment entered a veritable cauldron. Their regimental commander, Colonel Utz, directed the immediate commitment of the lead battalion into the fluid fighting around the airfield. This was no easy task, as the mountain troops had originally been allocated to the airfields to the east. This was a drastic change in plans, with no opportunity to coordinate actions with the units on the ground prior to landing. Platoons and sections were intermingled. The first company to arrive was used to reinforce the Assault Regiment, with the rest occupying positions on the southeast perimeter of the airfield.[66] The capabilities of these elite Army mountain troops were put to the test under the most chaotic conditions.

In an illustration of the close integration at higher levels of the Luftwaffe and Army units participating in MERCURY, Lieutenant General Ringel arrived on Crete late on the 22nd to assume command of all German forces on the island, including the remaining paratroopers.[67] Ringel used his authority to reorganize the German forces during the night for an attack the next day. Beginning early on the 23rd he aggressively pressed the withdrawing New Zealand troops, and rapidly drove their remaining artillery out of range of Maleme airfield.[68] Centralized command

in this instance was essential to the efficient use of every asset available to the German forces.

Despite an increased emphasis on "jointness", recent United States contingency operations have not been good examples of full integration of available forces. During URGENT FURY, Marine Corps elements were assigned a geographically distinct objective area, in part to minimize the complications associated with tactically unifying their efforts with those of Army forces. In DESERT SHIELD, early-deploying Army and Marine tactical units operating in the same area along the Saudi coast had entirely separate chains of command reaching back to the Central Command's forward headquarters in Riyadh. Local coordination was accomplished with a hand shake, a less than ideal command arrangement for the friction and pressure of potential combat operations. The German Luftwaffe and Army forces employed in Operation MERCURY evidenced a far greater willingness to expediently subordinate elements of one service to the command of another, at every level.

Many days of hard fighting remained for the Germans after the consolidation of their foothold at Maleme. Nevertheless, this event, coupled with their overwhelming air superiority, spelled inevitable defeat for the defending allies. With the loss of their only significant port at Suda Bay on the 27th, the allied command made the decision to evacuate everything they could from the small seaport villages on the southern coast.[9] Organized resistance ceased on June 1st.

## X

## IMPLICATIONS FOR FUTURE CONTINGENCY OPERATIONS

Contingency operations are inevitably somewhat improvised affairs. They are built on bare-bones operation or concept plans

which are based in turn on assumptions which frequently do not pan out. They are inevitably affected in much the same way that the extemporaneous nature of the German Balkans campaign affected the planning, preparation, and execution of Operation MERCURY. As such, the German experience on Crete has a number of implications worthy of bearing in mind when considering our military response to future crises.

With regard to the acquisition of intelligence, German planners placed inordinate trust in the information provided by their intelligence system. We must avoid a similar over-reliance on the capabilities of our admittedly sophisticated architecture to generate a faultless picture of the enemy situation. We must exploit every intelligence asset at our disposal to confirm and reconfirm what we think are known facts. The ac old adage about "assuming the worst" is an appropriate concept when considering the alternatives in a contingency response. Plans must include an analysis of the effects of the most dangerous enemy course of action, as well as the most likely.

German planners based much of their hopes on the attainment of surprise in the landing area. Strategic and tactical surprise, though immensely desirable, cannot be counted upon for tactical success. We must plan for enough combat power at decisive points to defeat a forewarned and prepared enemy. This is not to discount the value of stringent efforts to maintain operational security. Anything we can do to prevent the enemy confirming intelligence from his other sources may help sew seeds of doubt in his commanders' minds, potentially delaying his response to our actions. Nevertheless, our contingency plans cannot be overoptimistic in their assumptions for the effects of surprise, and must be feasible without it.

As was the case for the Germans in MERCURY, our operational planning for future contingencies will be shaped by a wide array of influences. Politically-derived pressures, service parochialism, and powerful personalities will all have their effect. We must ensure that all feasible alternatives are examined prior to arriving at a decision, and that no potential capability is discarded because of artificial concerns that do not bear on the accomplishment of the mission. Contingency plans themselves must incorporate flexibility and redundancy in their application of force to objectives. Unlike the German concept for the assault on Crete, our plans in the future must positively ensure the concentration of adequate combat power at decisive points, with branches to allow rapid dispersal of effort to other locations if the key objectives are attained more rapidly than expected. Plans which assume quick, decisive success and require reaction *if things go wrong* are potentially disastrous in a contingency environment. Finally, planning must fully integrate the capabilities of every service component and allied element available, and avoid dispersing efforts simply because the forces are different.

The true state of affairs in Greece was not appreciated by the German High Command when they set the date for the execution of Operation MERCURY. The capability of regional infrastructure to logistically support a contingency operation must be taken into account from the outset. The key factor is to avoid being surprised by inadequacies once the operation has begun. Much can be done through ongoing regional studies in areas of potential crisis, and a wealth of data is available to logistics and operational planners. We must fully understand the potential

impact of infrastructure deficiencies on the operation, with regard to the time required to prepare a staging area to support operations; the resources required to develop necessary capabilities; and the effect of these requirements on the deployment of combat forces into the area. The Luftwaffe was directed to execute MERCURY prior to the shortly impending invasion of Russia. We must resist pressures to launch operations too early, and be capable of delaying if significant difficulties arise at the last minute. Additionally, we must assume that infrastructure development will be seen for what it is by the enemy, and anticipate the influence that will have on his readiness to confront us.

As MERCURY forcefully demonstrates, contingencies requiring initial forced entry operations are by their nature fraught with risk. Only in the rarest exceptions will operations proceed as planned, and levels of disruption routinely surpass those of even the most difficult conventional military activities. Commanders at all levels must be prepared for this, and understand the potential for a difficult, costly, and prolonged struggle to attain initial objectives. Leaders on the battlefield must be adaptable and aggressive, ready to seize any opportunity left open by the enemy. They must anticipate problems, be ready to react, and vigorously press attempts to retain the initiative in the execution of their assigned missions.

Commanders at senior levels must be resolute in the face of initial setbacks. They must be capable of adjusting plans and expectations as the situation develops. Above all, they must remain focused on the mission and objectives of the operation. Political and military leadership must realize that combat means casualties, and that forced entry contingency combat may mean

considerable casualties. Such circumstances may be unavoidable if our national interests are to be served by military action against a capable and well prepared opponent, making this the regretful price of doing business. The alternative is abandoning our interests in the face of any determined resistance, a policy no viable nation can tolerate.

The Germans employed some of the best units in the *Wehrmacht* on Crete, and even these barely obtained success. Such forced entry operations can be inordinately demanding on the units carrying them out. Though recent operations have not forcefully illustrated this point, many experiences during and since the Second World War have done so. Considerable resources are required to organize, equip, train, and maintain at a peak of combat readiness the specialized formations oriented on forced entry vertical or amphibious assaults. In an era of decreasing budgets and strength drawdowns, we must not loose sight of the continuing requirement to maintain such cohesive, durable formations in our force structure.

The United States has traditionally maintained its forced entry capabilities in separate services. Both the Army, using Air Force airlift assets and support, and the Marine Corps, using Navy amphibious lift and support, can deploy, stage, and execute contingency operations. Though tailored for particular environments and situations, capabilities overlap in many respects. It is reasonable to assume that in the future, as in the past, crisis response will require the application of every asset available at or rapidly deployable to the scene. The German Luftwaffe surrendered a considerable potential advantage in MERCURY when it discarded the inclusion of a robust and adequately

supported seaborne echelon. Our ability in the future to synergistically combine the capabilities of all four services may well be absolutely essential to the successful execution of a forced entry mission, particularly one in which unexpected obstacles are encountered. The only means of reliably obtaining this capability is to actively plan for and train for such joint operations before they are actually required. No unit should be required to do on the battlefield something that it has never done previously. This is particularly true under the pressures of a forced entry operation, with potentially unfamiliar forces involved close at hand. Joint integration must be the defining feature of contingency planning and exercise activities, regardless of service parochialism or budgetary driven self-interest.

## XI

## CONCLUSION

It is not difficult to conceive of a scenario presenting the United States' armed forces in the 1990's with a tactical situation similar to that faced by the Germans on Crete. Potential threats to American interests and allies exist around the world. A number of possible opponents are too powerful to be immediately assailed with only the forces transportable by our limited strategic airlift and on-station amphibious assault capability. The nation's political leadership may nevertheless feel compelled to commit the armed forces at short notice, against an enemy of considerable military capability. This could easily generate the same sort of relative combat power ratio confronting the Germans during Operation MERCURY. The current overmatch enjoyed by American aerospace and maritime forces over most

potential adversaries should not be unduly weighted. Shoulder-fired infrared missiles and easily concealed anti-aircraft artillery can drive supporting aircraft to high altitudes, greatly diminishing their effectiveness in any but a desert environment. Readily available high technology mines, against which the U.S. Navy is woefully underprepared, can greatly delay or even prohibit the conduct of amphibious operations. The American military cannot implicitly rely on these capabilities to gain a decisive advantage.

The uniformed commanders entrusted with the execution of such an operation must not be blinded to its potential pitfalls. Experiences in the last decade do not adequately represent the true range of possible outcomes. A doctrine rooted in only those experiences will leave us unprepared to face a real challenge. The German example in MERCURY has much to offer in this regard.

Senior commanders must not be overly confident in the ability of intelligence systems to accurately forecast the strength and disposition of the enemy. They must not count on strategic or tactical surprise to paralyze enemy reactions.

Plans must fully integrate all service capabilities in a coherent operational concept, regardless of service perspectives and competition for roles and missions. Commanders must not be so anxious to quickly overwhelm the enemy that they lose sight of the concept of massing at decisive points, thus fatally dispersing their efforts.

As the United States continues to withdraw forward deployed units and close overseas bases, the requirement for a prolonged build up of forces within tactical airlift range of an adversary becomes more likely. Extended times are also required for the assembly and movement of a sizable amphibious task force. Significant amounts of strategic airlift may be required by the

Air Force for the establishment of the infrastructure to support decisive air operations. This would further delay the forward positioning of the ground tactical units needed for forced entry and securing a lodgment for subsequent operations. Contingency planners must allow for the time and effort required to prepare an intermediate base of operations from which to launch a powerful, coordinated assault.

Every service capability must be considered for the contribution it can make to addressing the tasks at hand. Cohesive, resilient, and fully prepared contingency units must be accustomed through both doctrine and training to fighting jointly, prepared to conduct a unified effort in the most complex situations.

Finally, leadership at all levels must be resolute, capable of anticipating great difficulty and reacting to inordinate loss, yet remaining focused on the attainment of the objective. Once an operation of this nature had begun, with much at stake and little latitude for pauses to reorganize or reinforce efforts, the utmost determination is imperative.

Though much has been required to bring the United States from DESERT ONE to DESERT STORM, Operation MERCURY shows us that the balance between one or the other can be remarkably slight. We must know what it takes to prevail, and be fully prepared to do it.

ENDNOTES

## I. Introduction

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[32] Kiriakopoulos, Ten Days to Destiny, 89.

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[34] U.S. Army, Campaign in the Balkans, 126.

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[39] General Julius Ringel, The Capture of Crete, May 1941, MS B-646 (U.S. Army, Europe, 1947), 5.

[40] Donald MacIntyre, The Battle for the Mediterranean (New York: WW Horton, 1964), 67: Tantum and Hoffschmidt, Rise and Fall, 420.

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[44] Beevor, Crete, 78.

[45] Volkmar Kuhn, German Paratroops in World War II, trans. H.A. and A.J. Barker (London: Ian Allen, 1978), 60.

[46] Kuhn, German Paratroops, 70.

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[48] Tantum and Hoffschmidt, Rise and Fall, 124.

[49] Tantum and Hoffschmidt, Rise and Fall, 124.

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[63] Beevor, Crete, 138.

[64] Beevor, Crete, 139.

[65] Clark, Fall of Crete, 99; Beevor, Crete, 118.

[66] Shores and Cull, Air War, 348.

[67] Taylor, "Final Assault From Above", 48.

[68] Beevor, Crete, 127.

[69] Clark, Fall of Crete, 99.

[70] Clark, Fall of Crete, 100.

[71] Tantum, Rise and Fall of the Luftwaffe, 122.

[72] General Kurt Student, quoted in Clark, Fall of Crete, 101.

[73] Kiriakopoulos, Ten Days to Destiny, 236; Ringel, Capture of Crete, 40.

[74] Beevor, Crete, 153.

[75] Ringel, Capture of Crete, 47.

[76] Shores and Cull, Air War, 353; Bekker, Luftwaffe War Diaries, 275.

[77] Ringel, Capture of Crete, 41.

[78] Shores and Cull, Air War, 354; Clark, Fall of Crete, 123.

[79] Killen, History of the Luftwaffe, 173.

[80] Beevor, Crete, 161.

[81] Patrick Turnbull, "German Shock Troops", War Monthly, March 1980, 8.

[82] Kiriakopoulos, Ten Days of Destiny, 284.

[83] U.S. Army, Campaign in the Balkans, 128.

[84] Beevor, Crete, 162, 174.

VIII. Maintaining Resilient Units

[85] Roger Edwards, German Airborne Troops, (Garden City, NY: Doubleday), 24.

IX. Joint Tactical Integration

[86] Beevor, Crete, 153; Ringel, Capture of Crete, 49.

[87] Clark, Fall of Crete, 143.

[88] Beevor, Crete, 183.

XI. Conclusion

[89] Ringel, Capture of Crete, 77; U.S. Army, Campaign in the Balkans, 139.

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